Claims

5

10

15

20

25

30

1. A compound of formula (I),

$$\begin{array}{c|c}
N & -S \\
R^{1} & N & A
\end{array}$$

$$\begin{array}{c|c}
R^{2} & R^{3} \\
X & -R^{5}
\end{array}$$

$$\begin{array}{c|c}
R^{4} & & \\
R^{5} & & \\
\end{array}$$

$$\begin{array}{c|c}
R^{3} & & \\
\end{array}$$

$$\begin{array}{c|c}
R^{4} & & \\
\end{array}$$

$$\begin{array}{c|c}
R^{5} & & \\
\end{array}$$

$$\begin{array}{c|c}
R^{5} & & \\
\end{array}$$

the N-oxide forms, the pharmaceutically acceptable acid addition salts and stereochemically isomeric forms thereof, wherein

X is CH or N;

R¹ is hydrogen, C₁₋₆alkyl, C₁₋₆alkyloxy, C₁₋₆alkylthio, amino, mono- or di(C₁₋₆alkyl)amino, Ar¹, Ar¹NH-, C₃₋₆cycloalkyl, hydroxymethyl or benzyloxymethyl;

 R^2 is hydrogen, C_{1-6} alkyl, amino, aminocarbonyl, mono- or di(C_{1-6} alkyl)amino, C_{1-6} alkyloxycarbonyl, C_{1-6} alkyloxycarbonylamino, hydroxy or C_{1-6} alkyloxy;

R³, R⁴ and R⁵ are each independently selected from hydrogen, halo, C₁₋₆alkyl, C₁₋₆alkyloxy, trifluoromethyl, nitro, amino, cyano, azido, C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkylthio, C₁₋₆alkyloxycarbonyl or Het¹;

- is Ar², Ar²CH₂- or Het²;

Ar¹ is phenyl; phenyl substituted with 1, 2 or 3 substituents each independently selected from halo, C_{1-6} alkyl, C_{1-6} alkyloxy, trihalomethyl, amino or nitro;

Ar² is phenyl; phenyl substituted with 1, 2 or 3 substituents each independently selected from halo, C_{1-6} alkyl, C_{1-6} alkyloxy, trihalomethyl, amino or nitro;

Het¹ is a monocyclic heterocycle selected from oxazolyl, isoxazolyl, oxadiazolyl, thiazolyl, isothiazolyl, thiadiazolyl or oxazolinyl; and each monocyclic heterocycle may optionally be substituted on a carbon atom with C₁₋₄alkyl; and

Het² is a monocyclic heterocycle selected from furanyl, thiofuranyl, oxadiazolyl, thiadiazolyl, pyridinyl, pyrimidinyl or pyrazinyl; and each monocyclic heterocycle may optionally be substituted on a carbon atom with 1 or 2 substituents each independently selected from halo, C₁₋₄alkyl, C₁₋₄alkyloxy, nitro or trifluoromethyl.

5

10

15

20

25

30

35

- A compound according to claim 1 wherein X is N; R¹ is hydrogen, C₁₋₆alkyl, amino or di(C₁₋₆alkyl)amino; R² is hydrogen; R³, R⁴ and R⁵ are each independently selected from hydrogen, halo, C₁₋₆alkyl, C₁₋₆alkyloxy, trifluoromethyl, nitro or C₁₋₆alkyloxycarbonyl.
- 3. A compound according to any of claims 1 or 2 wherein X is N; R¹ is hydrogen, C₁₋₄alkyl or di(C₁₋₄alkyl)amino; R² is hydrogen; R³, R⁴ and R⁵ are each independently selected from hydrogen, halo, C₁₋₄alkyl, C₁₋₄alkyloxy or trifluoromethyl; and the bivalent radical is Ar², Ar²CH₂- or Het² wherein Ar² is phenyl and Het² is thiadiazolyl, pyridinyl, pyrimidinyl or pyrazinyl..
- 4. A compound according to any of claims 1 to 3 wherein X is N, R¹ is methyl, R² is hydrogen, R³ and R⁴ are hydrogen and R⁵ is trifluoromethyl
- 5. A compound according to claim 1 wherein the compound is 1-[4-(3-methyl-1,2,4-thiadiazol-5-yl)phenyl]-4-[3-(trifluoromethyl)phenyl]-piperazine; or 1-[5-(3-methyl-1,2,4-thiadiazol-5-yl)-2-pyridinyl]-4-[3-(trifluoromethyl)phenyl]-piperazine; a stereoisomeric form or a pharmaceutically acceptable acid addition salt thereof.
 - 6. A composition comprising a pharmaceutically acceptable carrier, and as active ingredient a therapeutically effective amount of a compound as claimed in any one of claims 1 to 5.
 - 7. A process of preparing a pharmaceutical composition as claimed in claim 6 wherein the pharmaceutically acceptable carriers and a compound as claimed in claim 1 to 5 are intimately mixed.
 - 8. A compound as claimed in any one of claims 1 to 5 for use as a medicine.
 - 9. Use of a compound as claimed in any one of claims 1 to 5 for the manufacture of a medicament for the treatment of angiogenesis dependent disorders.
 - 10. A process of preparing a compound as claimed in claim 1, wherein

5

10

15

20

25

a) an intermediate of formula (II) is reacted with an intermediate of formula (III) in a reaction-inert solvent and, optionally in the presence of a suitable base;

b) an intermediate of formula (IV) is treated with hydroxylamino-O-sulfonic acid in a reaction-inert solvent, in the presence of a suitable base, thereby yielding compounds of formula (I-a), defined as compounds of formula (I) wherein R¹ is methyl;

$$\begin{array}{c} CH_3 \\ H_3C-N \\ CH_3 \\ S \\ \end{array} \\ \begin{array}{c} R^2 \\ A \\ N \\ \end{array} \\ \begin{array}{c} R^3 \\ \\ R^5 \\ \end{array} \\ \begin{array}{c} R^3 \\ \\ CH_3 \\ \end{array} \\ \begin{array}{c} N-S \\ \\ N \\ \end{array} \\ \begin{array}{c} R^2 \\ \\ R^3 \\ \end{array} \\ \begin{array}{c} R^3 \\ \\ R^5 \\ \end{array} \\ \begin{array}{c} R^3 \\ \\ \\ R^5 \\ \end{array}$$

wherein in the above reaction schemes the radicals X, R^1 , R^2 , R^3 , R^4 , R^5 and — are as defined in claim 1, and W is an appropriate leaving group;

- c) or, compounds of formula (I) are converted into each other following art-known transformation reactions; or if desired; a compound of formula (I) is converted into a pharmaceutically acceptable acid addition salt, or conversely, an acid addition salt of a compound of formula (I) is converted into a free base form with alkali; and, if desired, preparing stereochemically isomeric forms thereof.
- 11. A compound of formula (IV),

$$\begin{array}{c} CH_3 \\ H_3C-N \\ CH_3 \\ \end{array} \qquad \begin{array}{c} R^2 \\ R^3 \\ \end{array} \qquad \begin{array}{c} R^4 \\ \end{array}$$

10

15

an acid addition salt, a *N*-oxide form or a stereochemically isomeric form thereof, wherein X, R^2 , R^3 , R^4 , R^5 and the bivalent radical A are as defined in claim 1.

- 5 12. A process of preparing a compound of formula (IV) as claimed in claim 10, wherein
 - a) an intermediate of formula (IX) is treated with N,N-dimethylacetamide dimethyl acetal in a reaction-inert solvent, thereby yielding a compound of formula (IV);

b) or, compounds of formula (IV) are converted into each other following artknown transformation reactions; or if desired; a compound of formula (IV) is converted into an acid addition salt, or conversely, an acid addition salt of a compound of formula (IV) is converted into a free base form with alkali; and, if desired, preparing stereochemically isomeric forms thereof.